I claim:

1. An optical reader comprising:

 a housing defining at least one cavity;

 a first imaging module mounted in said at least one cavity;

 a second imaging module mounted in said at least one cavity;

 wherein each of said first and second modules includes an image sensor, a support assembly, and at least one illumination light emitting diode;

 a control circuit in communication with each of said first and second imaging modules;

 wherein said control circuit is programmed, in response to a trigger signal, to:

  (a) capture a first frame of image data via actuation of said at least one illumination light emitting diode to provide flood illumination, and said image sensor of said first imaging module;

  (b) determine whether said first frame of image data includes decodable indicia;

  (c) automatically subject to a decode attempt a second frame of image data if said determination step (b) indicates that decodable indicia is not or is likely not represented in said first frame of image data, wherein said second frame of image data is captured via actuation of said at least one light emitting diode to provide flood illumination, and said image sensor of said second imaging module.

2. The reader of claim 1, wherein said control circuit in determining whether decodable indicia is represented in said first frame of image data attempts to decode decodable indicia represented in said first frame of image data.

3. The reader of claim 1, wherein said control circuit captures said second frame of image data contemporaneously while capturing said first frame of image data.

4. The reader of claim 1, wherein said control circuit in determining whether decodable indicia is represented in said first frame of image data preliminarily evaluates image data of said first frame without attempting to decode decodable indicia represented therein.

5. The reader of claim 4, wherein said control circuit in preliminarily evaluating said image data evaluates said image data to determine whether a saturation condition is present.

6. The reader of claim 1, wherein said first imaging module is a one dimensional imaging module and wherein said second imaging module is a imaging module.

7. The reader of claim 1, wherein said first and second imaging modules are configured to have first and second best focus distances, wherein said first best focus distance is at least 1 inch apart from said second best focus distance.

8. The reader of claim 1, wherein said trigger signal is an automatically generated trigger signal generated by decodable indicia being moved in a field of view of said reader.

9. The reader of claim 1, further comprising a trigger, wherein said trigger signal is generated when said trigger is pulled.

10. An optical reader comprising:

a housing defining at least one cavity;

a first imaging module mounted in said at least one cavity;

a second imaging module mounted in said at least one cavity;

wherein each of said first and second modules includes an image sensor, a support assembly, and at lest one illumination light emitting diode;

a control circuit in communication with each of said first and second imaging modules;

wherein said control circuit is programmed, in response to a trigger signal, to:

(a) capture a first frame of image data via a actuation of said at least one illumination light emitting diode thereby providing flood illumination and said image sensor of said first imaging module;

(b) determine whether said first frame of image data includes decodable indicia;

(c) automatically subject to a decode attempt a second frame of image data if said determination step (b) indicates that decodable indicia is not or is likely not represented in said first frame of image data, wherein said second frame of image data is captured via actuation of said at least one light emitting diode of said second imaging module thereby providing flood illumination and said

image sensor of said first imaging module, wherein no illumination light emitting diode of said first imaging module is actuated when said second frame of image data is captured.

11. The reader of claim 10, wherein said control circuit in determining whether decodable indicia is represented in said first frame of image data attempts to decode decodable indicia represented in said first frame of image data.

12. The reader of claim 10, wherein said control circuit captures said second frame of image data contemporaneously while capturing said first frame of image data.

13. The reader of claim 10, wherein said control circuit in determining whether decodable indicia is represented in said first frame of image data preliminarily evaluates image data of said first frame without attempting to decode decodable indicia represented therein.

14. The reader of claim 13, wherein said control circuit in preliminarily evaluating said image data evaluates said image data to determine whether a saturation condition is present.

15. The reader of claim 10, wherein said first imaging module is a one dimensional imaging module and wherein said second imaging module is a two dimensional imaging module.

16. The reader of claim 10, wherein said first and second imaging modules are configured to have first and second best focus distances, wherein said first best focus distance is at least 1 inch apart from said second best focus distance.

17. The reader of claim 10, wherein said trigger signal is an automatically generated trigger signal generated by decodable indicia being moved in a field of view of said reader.

18. The reader of claim 10, further comprising a trigger, wherein said trigger signal is generated when said trigger is pulled.

19. An optical reader comprising:

    a housing defining at least one cavity;

    a first imaging module mounted in said at least one cavity;

    a second imaging module mounted in said at least one cavity;

    wherein each of said first and second modules includes an image sensor, a support assembly, and at lest one illumination light emitting diode;

a control circuit in communication with each of said first and second imaging modules;

wherein said control circuit is programmed, in response to a trigger signal, to:

(a) capture a first and second frame of image data, wherein said first frame of image data is captured via actuation of said at least one light emitting diode thereby providing flood illumination and said image sensor of said first imaging module, and said second frame of image data is captured via actuation of said at least one light emitting diode thereby providing flood illumination and said image sensor of said second imaging module;

(b) determine whether said first and second frames include decodable indicia;

(c) automatically combine said first frame and said second frame to generate a third image representation if said determination step (b) indicates that decodable indicia is not or is likely not represented in said first and second frames of image data; and to

(d) subject said third image representation to a decode attempt.

20. The reader of claim 19, wherein said control circuit in determining whether decodable indicia is represented in said first and second frames of image data attempts to decode decodable indicia represented in said first and second frames of image data.

21. The reader of claim 19, wherein said control circuit captures said second frame of image data contemporaneously while capturing said first frame of image data.

22. The reader of claim 19, wherein said control circuit in determining whether decodable indicia is represented in said first and second frames of image data preliminarily evaluates image data of said first and second frames of image data without attempting to decode decodable indicia represented therein.

23. The reader of claim 22, wherein said control circuit in preliminarily evaluating said image data evaluates gray scale pixel values of said image data to determine whether a saturation condition is present.

24. The reader of claim 19, wherein said control circuit in combining said first and second frames of image data determines an area of overlap between said first and second frames of image data.

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25. The reader of claim 19, wherein said control circuit in combining said first and second frames of image data generates a signal indicative of a module-to-target distance of at least one of said modules.

26. The reader of claim 19, wherein said control circuit in combining said first and second frames of image data combines said first and second frames in a manner dependent on an angle between imaging axes of said first and second imaging modules.

27. The reader of claim 19, wherein said control circuit in combining said first and second frames of image data identifies a common graphical element commonly represented in said first and second frames of image data.

28. The reader of claim 19, wherein said first and second imaging modules are configured to have first and second best focus distances, wherein said first best focus distance is at least 1 inch apart from said second best focus distance.

29. The reader of claim 19, wherein said trigger signal is an automatically generated trigger signal generated by decodable indicia being moved in a field of view of said reader.

30. The reader of claim 19, further comprising a trigger, wherein said trigger signal is generated when said trigger is pulled.

31. An optical reader comprising:
   a control circuit;
   a first image sensor in communication with the control circuit, the first image sensor having a first imaging axis;
   a second image sensor in communication with the control circuit, the second image sensor having a second imaging axis, the second imaging axis different from the first imaging axis; and
   a first illumination source in communication with the control circuit, the first illumination source configured to provide flood illumination, the first illumination source emitting light along a first path.

32. The optical reader of claim 31 wherein the first image sensor includes a CCD image sensor.

33. The optical reader of claim 31 wherein the first image sensor includes a CMOS image sensor.

34. The optical reader of claim 32, wherein the second image sensor includes a CCD image sensor.

35. The optical reader of claim 32, wherein the second image sensor includes a CMOS image sensor.

36. The optical reader of claim 31, wherein the illumination source includes at least one light emitting diode.

37. The optical reader of claim 31, wherein, in response to a trigger signal, the control circuit activates the first illumination source, thereby illuminating a target optical indicia, the control circuit activates the first image sensor, the first image sensor capturing a first frame of image data representative of the target optical indicia, the first image sensor communicating the first frame of image data to the control circuit, the control circuit attempting to decode the first frame of image, the control circuit activating the second image sensor, the second image sensor capturing a second frame of image data representative of the target optical indicia, the second image sensor communicating the second frame of image data to the control circuit, the control circuit attempting to decode the second frame of image data.

38. The optical reader of claim 31 further including a second illumination source in communication with the control circuit, the second illumination source configured to provide flood illumination, the second illumination source emitting light along a second path different from the first path.

39. The optical reader of claim 38, wherein response to a trigger signal, the control circuit illuminates the target optical indicia with the first illumination source and captures a first frame of image data using the first image sensor.

40. A method of operating an optical reader having a plurality of image sensors and at least one illumination source, comprising the steps of:

      activating the at least one illumination source, thereby illuminating a target optical indicia;

activating the plurality of image sensors, the activation of each image sensor including the capturing of a frame of image data by each image sensor; and processing the frames of image data, wherein the frames of image data are processed in a predetermined order, wherein the processing includes determining if a frame of image data includes decodable indicia, wherein no further frames of image data are processed if the determination is made that a frame of image data includes decodable indicia.

41. The method of claim 40 wherein the step of activating the plurality of image sensors includes the substantially simultaneous capture of a frame of image data by each image sensor.

42. The method of claim 40 wherein the step of activating the plurality of image sensors includes the activating at least two of the plurality of image sensors in a predetermined order.

43. The method of claim 42 wherein the step of processing the frames of image data includes processing the frames of image data in a predetermined order.

44. The method of claim 43 wherein the step of processing the frames of image data includes processing the frames of image data in the order in which they were captured.

45. The method of claim 40 wherein the at least one illumination sources includes a plurality of illumination sources, at least one illumination source of the plurality of illumination sources being associated with each image sensor of the plurality of image sensors.

46. The method of claim 45 wherein the step of activating the plurality of image sensors includes the substantially simultaneous capture of a frame of image data by each image sensor.

47. The method of claim 45 wherein the step of activating the plurality of image sensors includes the activating at least two of the plurality of image sensors in a predetermined order.